



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/588,708

08/09/2006

Toshiaki Sasaki

81844.0052

2456

26021 7590 09/24/2009
HOGAN & HARTSON L.L.P.
1999 AVENUE OF THE STARS
SUITE 1400
LOS ANGELES, CA 90067

EXAMINER

GARDNER, SHANNON M

ART UNIT

PAPER NUMBER

1795

NOTIFICATION DATE

DELIVERY MODE

09/24/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ctkeyner@hhlaw.com
LAUSPTO@hhlaw.com
lbrivero@hhlaw.com

Advisory Action Before the Filing of an Appeal Brief	Application No. 10/588,708	Applicant(s) SASAKI ET AL.	
	Examiner Shannon Gardner	Art Unit 1795	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 20 August 2009 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☐ The period for reply expires _____ months from the mailing date of the final rejection.
- b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
- (a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
- (b) ☐ They raise the issue of new matter (see NOTE below);
- (c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
- (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): _____.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
- The status of the claim(s) is (or will be) as follows:
- Claim(s) allowed: _____.
- Claim(s) objected to: _____.
- Claim(s) rejected: 1-3, 5-7, 9-11.
- Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: see Continuation Sheet.
12. ☐ Note the attached Information *Disclosure Statement*(s). (PTO/SB/08) Paper No(s). _____
13. ☐ Other: _____.

/Jennifer K. Michener/
Supervisory Patent Examiner, Art Unit 1795

/S. G./
Examiner, Art Unit 1795

Continuation of 11. does NOT place the application in condition for allowance because:

Applicant has amended claim 1 to include the limitations from the previously listed claim 8, which is now cancelled.

The Examiner notes that claim 1 is still unpatentable over Tawada in view of Matsui and Robinson. Tawada in view of Matsui teach the limitations of claim 1 but are silent as to the transparent micro-particles having an average particle diameter of not less than 10 nm and not more than 95 nm. However, it is known in the art to create a substrate containing silica micro-particles (such as those used in modified Tawada) with particles having an average diameter of 5 to 25 nm, thus creating an improved flexible substrate surface with good high-temperature dimensional stability and high optical clarity, as taught by Robinson (paragraphs [0012]-[0018] and [0025]). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to utilize silica micro-particles having an average diameter of 5 to 25 nm in the invention of modified Tawada to create an improved substrate surface as taught by Robinson.

The Examiner further notes that in the case where the claimed ranges 'overlap or lie inside ranges disclosed by the prior art' a prima facie case of obviousness exists. Further still, the teachings of Tawada provide for micro-particles of 0.1 to 1.0 microns (100nm to 1000nm). A prima facie case of obviousness exists where the claimed ranges and prior art ranges do not overlap but are close enough that one skilled in the art would have expected them to have the same properties (see MPEP 2144.05).

Claims 2-3, 5-7 and 9-11 stand rejected as previously presented in the Office Action dated 6/22/2009.

Applicant argues that "the Office has failed to present an adequate showing as to why Tawada's teaching of an average diameter of 0.1 to 1.0 microns should be ignored in favor of Robinson's teaching of an average diameter of 5 to 25 nm" (pp 7 of Arguments).

The Examiner directs Applicant to the final Office Action of 6/22/2009 for a full discussion of the references. Tawada teaches a general range for the average diameter of his micro-particles. However, one of ordinary skill in the art at the time of the invention would have looked to the teachings of the prior art for ways to further develop the substrate containing the micro-particles. Particularly, one of ordinary skill would have looked to the teachings of Robinson for information on improvements to the substrate by utilizing micro-particles sized 5 nm to 25 nm.

Applicant argues that "The surfaces disclosed in Matsui are different than the surfaces of the present invention...Matsui teaches the unevenness of the ZnO layer but is silent as to the unevenness of the transparent foundation layer" (pp 8 of Arguments).

The Examiner notes that Matsui is relied upon as a general teaching regarding the use of textured substrates with a RMS roughness of a specified value to improve the conversion efficiency (see abstract and Introduction). It would have been obvious to one of ordinary skill in the art at the time of the invention to apply this teaching to the transparent insulating substrate of Tawada to improve the conversion efficiency.